

Application No.: 10/659,133
Amendment dated: September 7, 2005
Reply to Office Action dated: July 7, 2005

AMENDMENTS TO THE CLAIMS

1. (Cancelled)
2. (Currently Amended) ~~An apparatus for sharing a resource, comprising:~~
a resource having a plurality of elements;
at least first and second components to access the elements of said resource; and
an access controller coupled to said resource and said at least first and second
components to store a first mask value, wherein access to the elements of said resource by said
first and second components is controlled based on said first mask value.
3. (Original) The apparatus of claim 2 wherein said first mask value represents which of the
elements of said resource are available for access for a selected component.
4. (Currently Amended) ~~An apparatus for partitioning a memory resource, comprising:~~
a memory resource having a plurality of addressable blocks;
first and second components adapted to access said memory resource; and
an access controller having a register adapted to store a first mask value, wherein access
to addressable blocks of said memory resource is controlled based on said first mask value.
5. (Original) The apparatus of claim 4 wherein said memory resource is a cache memory.

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6. (Original) The apparatus of claim 5 further comprising:

a processor coupled to said cache memory, wherein said first component includes execution of instructions by said processor from a first thread and said second component includes execution of instructions by said processor from a second thread.
7. (Original) The apparatus of claim 6 wherein said first mask value represents which of the addressable blocks of said cache memory are available for eviction.
8. (Original) The apparatus of claim 7 wherein a first mask value is provided for each of said components, said first mask values indicate which of the addressable blocks of said cache memory are available for eviction for one of said components and which of the addressable blocks of said cache memory are available for eviction for at least two of said components.
9. (Original) The apparatus of claim 8 wherein an eviction array is provided indicating the least recently used addressable block of said cache memory and a second mask is provided, said second mask value selecting which bits of said eviction array are used in controlling which of the addressable blocks of said cache memory are available for eviction.
10. (Previously Presented) The apparatus of claim 6, wherein an eviction array is provided indicating a least recently used addressable block of said cache memory and wherein said first

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mask value is an auxiliary mask value and said auxiliary mask value represents which of the addressable blocks of said cache memory are available for eviction and selects which bits of said eviction array are used in controlling which of the addressable blocks of said cache memory are available for eviction.

11. (Currently Amended) A method ~~for sharing a resource having a plurality of elements between at least first and second components, comprising:~~

controlling, with an access controller coupled to ~~said~~ at least first and second components, which of said at least first and second components are able to access which elements of ~~said~~ a resource; and

storing in a register of said access controller a first mask value, wherein access to the element of said resource is controlled based on said first mask value.

12. (Cancelled)

13. (Currently Amended) The method of claim ~~12~~ 11 further comprising:

determining which of said first and second components is accessing said resource; and
determining which of the elements of the resource are available for access by the component accessing said resource based on said first mask value.

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14-17 (Cancelled)

18. (Currently Amended) A set of instructions residing in a storage medium, said set of instructions capable of being executed by a processor ~~for sharing a resource having a plurality of elements between at least first and second components comprising:~~

controlling, with an access controller coupled to ~~said~~ at least first and second components, which of said at least first and second components are able to access which elements of ~~said~~ a resource; and

storing in a register of said access controller a first mask value, wherein access to the element of said resource is controlled based on said first mask value.

19. (Cancelled)

20. (Currently Amended) The set of instructions of claim ~~19~~ 18, wherein the execution of said set of instructions further comprises:

determining which of said first and second components is accessing said resource; and
determining which of the elements of the resource are available for access by the component accessing said resource based on said first mask value.

21-24 (Cancelled)